

#605

AEROS-B  
ELECTRON DENSITY DATA  
74-055A-03A

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## **1. INTRODUCTION:**

The documentation for this data set was originally on paper, kept in NSSDC's Data Set Catalogs (DSCs). The paper documentation in the Data Set Catalogs have been made into digital images, and then collected into a single PDF file for each Data Set Catalog. The inventory information in these DSCs is current as of July 1, 2004. This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system. The information existing in the DSCs is now not needed for locating the data files, but we did not remove that inventory information.

The offline tape datasets have now been migrated from the original magnetic tape to Archival Information Packages (AIP's).

A prior restoration may have been done on data sets, if a requestor of this data set has questions; they should send an inquiry to the request office to see if additional information exists.

## 2. ERRATA/CHANGE LOG:

NOTE: Changes are made in a text box, and will show up that way when displayed on screen with a PDF reader.

*When printing, special settings may be required to make the text box appear on the printed output.*

Version	Date	Person	Page	Description of Change
01				
02				

3 LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC INFORMATION SYSTEM:

<http://nssdc.gsfc.nasa.gov/nmc/>

[NOTE: This link will take you to the main page of the NSSDC Master Catalog. There you will be able to perform searches to find additional information]

4. CATALOG MATERIALS:

- a. Associated Documents      To find associated documents you will need to know the document ID number and then click here.  
<http://nssdcftp.gsfc.nasa.gov/miscellaneous/documents/>

- b. Core Catalog Materials

AEROS 2

ELECTRON DENSITY DATA, TAPE

74-055A-03A SPIO-00233

This data set has been restored. There were originally 2 9-track, 1600 BPI tapes written in BIN. There is 1 restored tape. The DR tape is a 3480 cartridge and the DS tape is 9-track, 6250 BPI. The tape was created on an UNIVAC 1100 computer. The DR and DS numbers along with the corresponding D numbers and the time spans are as follows:

DR#	DS#	D#	FILES	TIME SPAN
DR03646	DS03646	D58820	1	07/23/74 - 12/01/74
		D58821	2	12/01/74 - 09/25/75

REQ. AGENT  
RSH

RAND NO.  
V0201

ACQ. AGENT  
RNH

AEROS-B  
74-055A-03A  
ELECTRON DENSITY DATA

This data set consists of 2 tapes which are 9-track, 1600 BPI, in Binary created on an UNIVAC 1100 computer system. Each tape has 1 file.

<u>D#</u>	<u>C#</u>	<u>TIME SPAN</u>
58820	23329	07/23/74 - 12/01/74
58821	23330	12/01/74 - 09/25/75

Dr. J.I. VETTE, Director  
WDC-A Rock. & Sat.  
NASA-GSFC, Code 601  
GREENBELT / Md.  
20771 U.S.A.

Dear Jim.

with this letter you receive two tapes with the electron density data of the AEROS-B mission (16-07-74 ... 25-09-75) as measured by the on-board impedance probe. Wherever this experiment was "on" the sequence of data is much narrower than for the experiment RPA (data of which you have received earlierly as "KUERZ"). Therefore these data should be particularly suited for studying structures in electron density. The format is similar to that of the KUERZ tapes, only with 11 instead of 15 words per line. Coding is the same (binary); the tapes should be readable for you with almost the same program as you have for KUERZ. (I assume that procedure "NTRAN" has resolved the problems your collaborator earlierly had encountered).

This concludes the transfer of AEROS data from the plasma and optical experiments to your WDC.

With my best regards

sincerely yours





## WORD IDENTIFICATION

## DECIMAL DIGIT

	10	9	8	7	6	5	4	3	2	1
WORD NUMBER										
1	MISSION 1 OR 2	MODE	SOLAR ZENITH ANGLE			ORBIT NUMBER				
2	MEAN JULIAN DATE 1 (d)				MEAN JULIAN DATE 2 ( $10^{-6}$ d)					
3	CRI-	YEAR	DAY OF YEAR			UT HOUR		MINUTES		
4	Mc ILLWAIN'S L (1 / 100)				GEOM. HOURS	LOCAL	TIME MINUTES	SECONDS		
5	MAGN. INDEX KP $\beta$		COVINGTON INDEX			MAGN. INDEX R (ZUERICH) AP				
6	/ / / / / / / / / /		MAGN. FIELD B (0.01T)			SATELLITE ALTITUDE (10m)				
7	GEODETIC LONGITUDE ( $10^{-4}$ RAD)				GEODETIC LATITUDE ( $10^{-4}$ RAD)					
8	GEOMAGNETIC LONGITUDE ( $10^{-4}$ RAD)				GEOMAGNETIC LATITUDE ( $10^{-4}$ RAD)					
9	MAGN. INCLINATION ( $10^{-4}$ RAD)				MAGN. DECLINATION ( $10^{-4}$ RAD)					
10	MODIFIED DIP ( $10^{-4}$ RAD)				INVARIANT LATITUDE ( $10^{-4}$ RAD)					
11	LN (PLASMA DENSITY / $m^{-3}$ )				LN (PLASMA DENSITY / $m^{-3}$ ) -empty-					

BLOCKING: Integer numbers only. Double words of 9 characters per pair, i. e.  $4\frac{1}{2}$  per number (36 bit). One block has 2200 words, subdivided into 200 lines of 11 words each. Each line contains all data of one measurement. In decimal writing 10 digits are available per word. Many words are subdivided. In words 7 ... 9 the sign is given by the last digit: even for sign +, odd for sign -.

DS03646

7/23/74 12/1/74

DUMP OF TAPE CN1110

INPUT TAPE CN1110 ON HT  
DATA INPUT OS NF=2 FL=2=1=1

FILE	RECORD	LENGTH	BYTES
( )	17 276211	2 61844871	478527.66
( 48 )	3 713227 5	27542676	4763 8.0
( 98 )	1107112242	1101 12676	1811314
( 144 )	1476527266	716122347	1763196714
( 19 )	22113 472	17 285 814	618442717
( 24 )	117 4 46674	12677296827	684681356
( 38 )	18793 86714	1111114736	701785314
( 33 )	21815443132	1476527 66	712261343
( 38 )	246742527	2218114304	2537-20
( 43 )	10823341164	10147 16762	28218-171
( 48 )	17176220251	14763156714	111317482
( 52 )	17 251742	2 61844871	478527.66
( 57 )	12284 13437	6823 8637446	146731140
( 62 )	1011138224	101515177514	25876705
( 67 )	1476527 66	7 642 264	1763156714
( 72 )	121611624	17 2446324	1184-3775
( 78 )	10135821644	12151428471	113117236
( 81 )	18763 46714	10111124866	407386051
( 84 )	101544421	1476527 66	7 258717
( 91 )	177 8 3564	221757516	7 3315 300
( 96 )	183 411724	1044 17173	1744 17125
( 102 )	17 2587175	14763 156714	111427304
( 108 )	17 23183	1061844528	178527.66
( 114 )	1611364075	1571161184	214236640
( 119 )	101111732123	10022225352	593759520
( 12 )	1476527 66	10676718111	1763 86714
( 124 )	223111624	17 24 3634	6184-5753
( 129 )	101332 3310	1378304727	1364364302
( 134 )	14763 86714	10112234523	114116684
( 139 )	2 618448267	1476527 66	878716118
( 144 )	11234725242	1224567383	17 22 36347
( 149 )	101134682754	101742153410	169384469
( 154 )	101373 5512	14763 86714	11312353
( 158 )	17 2 7244	2 61844834	1476527.66
( 163 )	101 229 5537	1011064672	262351740
( 168 )	10113345154	101151331146	1051732166
( 173 )	1476527 66	672 551 4	1763 86714
( 178 )	227 7412	17 2 7244	618446131
( 183 )	1131184758	108 318473	81584331
( 187 )	14763 86714	113647527	18864402
( 192 )	2 618446345	1476527 66	873135110
( 198 )	1044 14314	223 5113240	17 17612440
( 204 )	10123811655	1124 743349	381351031
( 209 )	10173 58115	16763 86714	114495332
( 214 )	17 168 5	618448682	7887 66
( 219 )	10118422615	10218424264	12 761740
( 224 )	10118463395	1033675312	1347713634
( 229 )	1476527 66	607214 3	1763 86714
( 234 )	2234 3094	17 168 5	6184-72-7
( 239 )	10127755126	10115472815	106 74300



( 1314)  
( 13152)

CCCCCCCCCCCC  
CCCCCCCCCCCC

FILE	INPUT	DATA RECORDS	MAX.	READ ERROR SUMMARY				INPUT RETRIES	
	RECS.	INPUT	SIZE	PERM	ZERO B	SFCAT	UNDEF.	#RECS.	TOTAL
	1999	3	99						

EQJ LUMP STOPPED AFTER FILE 2 # OF PERMANENT READ ERRORS

START TIME 1/1/92 09:53:43 STOP TIME 1/1/92 09:55:49

DUMP OF TAPE ROUTAE1

AE ROS - B  
D - 58820 C-23329  
7/23/74 - 12/1/74

INPUT TAPE ROUTAE1 ON TUI  
DATA INPUT 09 FL 1 2 2

FILE	1 RECORD	1 LENGTH	13200BYTES
( 0 )	017027620100	020615442371	014765270660
( 48 )	003071322705	002754267600	023476306000
( 96 )	000107512262	001010126760	000016113140
( 144 )	014765270660	00071622367	016763056714
( 192 )	022113047200	017026506140	020615442717
( 240 )	000040046674	002677256637	002600621356
( 288 )	016763056714	000110014736	000701765314
( 336 )	020615443132	014765270660	000712261343
( 384 )	002467425270	022131141640	017025374200
( 432 )	000623341164	000147016762	002502160171
( 480 )	000706420251	016763056714	000110317402
( 528 )	017025374200	020615443450	014765270660
( 576 )	002354003437	002302637446	022146731040
( 624 )	000110622240	000515177514	000255767050
( 672 )	014765270660	000706420264	016763056714
( 720 )	022161162400	017024262240	020615443775
( 768 )	000335221644	002151426471	002113017236
( 816 )	016763056714	00011124666	000407036050
( 864 )	020615444210	014765270660	000702557170
( 912 )	001770503564	022176751600	017023150300
( 960 )	000330411720	000444171730	0001744017125
( 1008 )	000702557175	016763056714	00011427304
( 1056 )	017023150300	020615444526	014765270660
( 1104 )	001610364075	001571161164	022214235540
( 1152 )	000111732123	000222250252	000553750520
( 1200 )	014765270660	000676716111	016763056714
( 1248 )	022231216240	017022036340	020615445053
( 1296 )	000633203310	001376304727	001364360302
( 1344 )	016763056714	000112234523	000114106604
( 1392 )	020615445267	014765270660	000676716115
( 1440 )	001230725242	022245673500	017022036340
( 1488 )	000034653754	000742153400	001160364465
( 1536 )	000673055022	016763056714	000113042353
( 1584 )	017020724400	020615445604	014765270660
( 1632 )	001022505537	001016646072	022262350740
( 1680 )	000113345154	000051331146	001051732166
( 1728 )	014765270660	000673055104	016763056714
( 1776 )	022270741200	017020724400	020615446131
( 1824 )	001131164760	000603150073	000601534330
( 1872 )	016763056714	000113647527	000156664002
( 1920 )	020615446345	014765270660	000673055110
( 1968 )	000440014304	022305113200	017017612440
( 2016 )	000236116550	001240743546	000360560031
( 2064 )	000673055115	016763056714	000114455332
( 2112 )	017016500500	020615446662	014765270660
( 2160 )	000215422605	000215422664	022320761740
( 2208 )	000115263355	000345675302	001347713636
( 2256 )	014765270660	000667214030	016763056714
( 2304 )	022334630500	017016500500	020615447207
( 2352 )	001427755126	000006072605	000006074300
( 2400 )	016763056714	000116071145	000453230136
( 2448 )	020615447423	014765270660	000667214033
( 2496 )	000151231476	022342412240	017015366540
( 2544 )	000532462706	001537533714	000232706447
( 2592 )	000667214040	016763056714	000117202164
( 2640 )	017015366540	020615366540	014765270660
( 2688 )	000376652325	000376654070	022355755540
( 2736 )	000117504733	000642241436	001647312504
( 2784 )	000461137513	000461137513	000461137513
( 2832 )	000461141272	000461141272	000461141272
( 2880 )	022363537300	017015366540	020615450154

